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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,366	03/14/2000	Edward J. Grenchus JR.	END00-0019US1	8932

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EXAMINER

SHAFFER, ERIC T

ART UNIT

PAPER NUMBER

3623

DATE MAILED: 12/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/524,366	GRENCHUS ET AL.	
	Examiner	Art Unit	
	Eric T. Shaffer	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 30 October 2002.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

<ol style="list-style-type: none"> <li>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)<input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u>.</li> </ol>	<ol style="list-style-type: none"> <li>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.</li> <li>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6)<input type="checkbox"/> Other: _____.</li> </ol>
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## **DETAILED ACTION**

1. The following is an initial Office Action upon examination of the above-identified application on the merits. Claims 1 – 10 are pending in this application.

### ***Summary Of Instant Office Action***

2. Applicant's arguments, filed on October 30, 2002, concerning claims 1 – 10 in the Office Action mailed June 11, 2002, have been considered and deemed unpersuasive.

None of the old claims have been cancelled by the applicant and the applicant has not added any new claims. Claims 1 – 10 are pending and are prosecuted in the response set out below.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1 – 4 and 6 - 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 5,965,858) in view of Graff (US 6,192,347).

Suzuki et al teaches a system for recycling of discarded electronic components that features a database of component and commodity prices. Suzuki et al also teaches an optimal recycling processing method used to modifying recycling rules. Suzuki et al does not

specifically mention optimization motivated by generating the largest revenue or achieving maximum revenue by not disassembling property into parts.

**Claims 1 and 6 - 9** discloses a method, computer system and computer program product of optimally demanufacturing a product to provide greatest economic benefit.

The method is anticipated by Suzuki et al., which discloses “the recycle method decision processor unit determines the recycle processing method for the discarded article in accordance with the recycle processing decision procedure stored in the recycle method decision module incorporated in the recycle method decision processor unit while acquiring from the various databases the information required for determining the recycle processing method as the occasion requires. The recycle processing decision procedure is executed in the manner as briefly described hereinbefore by referring to FIG. 2” (column 22, lines 27 - 36).

Suzuki et al also teaches an optimal method of recycling by reciting, “new recycling processing methods will be developed from one to another with the optimal recycle processing methods changing correspondingly” (column 8, lines 63 - 65).

**Claims 1 and 6 - 9** comprises of the following steps:

Collecting a resale price for said product and collecting resale prices of parts. This is anticipated by Suzuki et al., which discloses article specifications, which are fields in a database table. One such table is called Market Information, where “Market Information (details of which, i.e., used article information, are illustrated in FIG. 30). Contents: information of market prices of used articles, part demand information, etc.” (column 14, lines 32 - 35).

Collecting one or more commodity prices is anticipated by Suzuki et al., which discloses “The purchase prices of the material dealers are recorded in the material/part-based recycle

method database 37 on a material-by-material basis" (column 42, lines 53 - 55). Suzuki et al. also teaches the computation of resale prices of parts in column 42, lines 53 – 55.

Suzuki et al. does not explicitly teach the determination of the labor expenses of removing parts from computer products, however he does tabulate the "standard number of disassembling steps or processes involved (hours)" (column 35, lines 23 – 24).

Official notice is taken that it is old and well known in the art of pricing to take into account labor expenses associated with producing a product into account when pricing a product for sale. Since Suzuki et al already teaches the tabulation of hours in disassembling a product, the examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to consider labor expense as part of Suzuki's computer model in order to determine an accurate profit margin, thereby facilitating profitable pricing.

Referring to FIG. 5, the recycle method decision processing system includes a recycle method decision processor unit for making decision as to the recycle processing method, an input unit for inputting information, a recycling factory facility control unit for controlling equipment and others installed within the recycling factory, a use history information accumulating unit for accumulating use history information on an article-by-article basis, a storage unit for storing a database of information concerning the reuse of manufactured articles and a recycle method decision result storage unit for storing the results of the recycle processing methods decided or determined by the recycle method decision processor unit" (column 8, lines 8 - 26).

All of computer instruction means are recorded on said medium. This is anticipated by Suzuki et al., which discloses, "the recycle method decision processor unit further includes a recycle method decision module which stores therein a recycle processing decision procedure" (column 8, lines 55 - 57).

While Suzuki et al does not specifically mention optimization motivated by generating the largest revenue or achieving maximum revenue by not disassembling property into parts, Graff does in fact teach decomposition of a property with the goal of maximizing revenue. Graff teaches the comparison between the value of a whole unit to the sum of said units individual parts by reciting, "property value consists of separately valuable property rights that can be worth more when sold separately. In a manner of speaking, the whole can be less than the sum of parts" (column 2, lines 52 - 56).

Graff goes further and even considers tax benefits of disassembly, reciting, "due to an interplay of values for the property components and the needs of respective purchasers, including tax needs, it is frequently possible to sell the components of the property separately for more than the price of the property as a whole would command" (column 3, lines 44 - 49).

Graff also teaches alternative ownership methods to maximize revenue by reciting "a component can be divided into shares so that investors can purchase fractional interests in the component" (column 5, line 14 - 16) and the use of insurance to enhance value by reciting "insurance is available to protect remainder component investors against the risk of a decline in property value" (column 5, lines 47 - 49).

Graff considers property value, the sum of components value, tax consequences, insurance and alternative investment structures in order "to maximize profitability of the components" (column 10, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the means to compare the value of the whole versus the sum of the component parts in order to maximize revenue with the Suzuki et al invention because such a combination would serve to increase revenues and maximize profits. The concept of comparing the value of the whole with the sum of the parts and the desire to maximize revenue is old and well known in the art of business at the time of the applicant's invention and was taught by the Graff invention.

3. **Claim 2** discloses resale prices, commodity prices and labor expense are provided in a database that can be updated.

Providing resale prices for parts is anticipated by Suzuki et al., which discloses "the market information database stores therein the market prices of the used articles for each of the types of the articles so that the market price information can be obtained when the restored article such as the restored televisions are to be recycled as the used article, as can be seen from FIG. 30. Besides, the information concerning the market prices of the used component parts of the article is also stored so that the market prices of the parts can be made available when they are to be recycled as the used parts" (column 10, lines 31 - 40).

Providing commodity prices in a database is anticipated by Suzuki et al., which discloses "The purchase prices of the material dealers are recorded in the material/part-based recycle method database on a material-by-material basis (column 42, lines 53 - 55).

While Suzuki et al. does not specifically mention having labor cost figures in a database, Suzuki et al. does define a field in a database table as the “standard number of disassembling steps or processes involved (hours)” (column 35, lines 23 – 24). Official notice is taken that it is old and well known in the art of pricing to take into account labor expenses associated with producing a product when pricing a product for sale. Since Suzuki et al already teaches the tabulation of hours in disassembling a product, the examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to consider labor expense as part of Suzuki’s computer model in order to determine an accurate profit margin, thereby facilitating profitable pricing.

4. **Claim 3** discloses that the information in the databases is periodically updated. This is anticipated by Suzuki et al., which discloses “Works for inputting the information into the individual databases as well as works for maintenance/management of the data such as correction or modification thereof may be performed internally of each enterprise as mentioned above. As an alternative, such works may be performed by a common organization established by a plurality of manufacturers of the same trade or by an official corporation” (column 10, lines 41 - 47).

5. **Claim 4** further discloses that the database is updated monthly. Official notice is taken that a month is a defined period of time of either 28, 29, 30 or 31 days. Any operation that can be performed on a monthly basis could easily be performed in the aforementioned time frames. Therefore it would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to update Suzuki’s database monthly since a month is a standard timeframe for financial reporting.

7. **Claim 10** recites a database comprising resale prices, said commodity prices, and said labor expense, and wherein said database is recorded on said medium. This is anticipated by Suzuki et al., which discloses “Works for inputting the information into the individual databases as well as works for maintenance/management of the data such as correction or modification thereof may be performed internally of each enterprise as mentioned above. As an alternative, such works may be performed by a common organization established by a plurality of manufacturers of the same trade or by an official corporation” (column 10, lines 41 - 47).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 5,965,858) in view of Graff (US 6,192,347) and in further view of the Microsoft Computer Dictionary published in 1997.

Suzuki et al teaches a database in Figures 26 and 28 – 30 while reciting “works for inputting the information into the individual databases” (column 10, lines 41 – 41). Suzuki et al does not specifically mention a spreadsheet application. Combined, Suzuki et al and Graff do not specifically teach a spreadsheet or distinguish the differences and similarities between a spreadsheet and a database.

The Microsoft Computer Dictionary published in 1997 defines a database as “file of records, each containing fields together with a set of operations for searching, sorting, recombining and other functions” (page 129) and also defines a spreadsheet as an application “that organizes data values using cells, where the relationships between cells are defined by formulas” (page 446). Since a record is made up of individual cells and since the recombining function is performed by formulas that relates the cell values, it would be obvious for one skilled in the art of computer programming at the time of the applicants invention to see that spreadsheets are in fact a simplified type of database because spreadsheets store and manipulate data that is extracted from databases.

#### ***Response to Amendments***

1. Applicant’s arguments filed on October 30, 2002 have been fully considered, but the same are not persuasive. Applicant argues:
  - a) “Suzuki et al does not disclose basing a decision as to whether a given discarded article should be sold in an intact state or disassembled and sold for part and/or commodity value”. The addition of the Graff reference teaches the concept of comparing the value of a whole item with the sum total of the value of the individual parts by reciting, “it is frequently possible to sell the components of the property separately for more than the price of the property as a whole would command” (column 3, lines 44 - 49).
  - b) “Suzuki et al does not disclose optimizing demanufacturing to recover the largest revenue”. The addition of the Graff reference teaches disassembly into parts in order to “maximize profitability of the components” (column 10, line 3).

- c) "Suzuki et al emphasizes making a decision as to whether the parts or the assemblies can be reused rather than making a decision on recovering the largest revenue". Suzuki et al does in fact teach that items may be reused by disclosing, "discarded televisions are first classified into articles to be recycled as the reproduced or restored televisions for reuse and as the waste televisions incapable of restoration" (column 6, line 19 - 22).
- d) "Applicant requires separating any remaining parts into commodities and offering these commodities for resale". Suzuki et al teaches a method that defines recycling as a process that incorporates converting a discarded article into component parts or materials by reciting, "in such discarded articles, some parts of metals such as iron, aluminum and the like are recycled as restored materials or substances" (column 1, lines 17 - 18). Suzuki et al teaches an optimal method of recycling by reciting, "new recycling processing methods will be developed from one to another with the optimal recycle processing methods changing correspondingly" (column 8, lines 63 - 65). Since Suzuki et al teaches a device that recycles and defines recycling as a process that converts parts into materials or commodities, the Suzuki et al invention does teach separation of remaining parts into commodities
- e) Claim 5 recites a spreadsheet model but the examiner refers to a database format. As clarified by the Microsoft Computer Dictionary's definitions of database and spreadsheet listed above in the analysis of claim 5, a database teaches the concept of a spreadsheet since a spreadsheet is a simplified form and less functional version of a database, both of which store data fields in records and manipulate data using formulas.

***Conclusion***

19. Applicant's amendment necessitates the new ground(s) of rejection presented in this Office Action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 1.136(a). The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric Shaffer whose telephone number is (703) 305-5283. The Examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax number for the organization is (703) 305-0040/308-6306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 305-3900.

Eric Shaffer

December 24, 2002

*[Handwritten signature of Tariq R. Hafiz]*  
TARIQ R. HAFIZ  
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